

Advancing staff equity in STEMM in the face of COVID-19

A position paper by the Monash University Athena SWAN Committee

1. Introduction and aims

Literature and data are emerging worldwide on the risks and impact of COVID-19 on equity outcomes for groups that are underrepresented in the workplace (1, 2, 3). This paper identifies the emerging equity impacts on our staff and presents key risks and opportunities as we progress through this pandemic and come out the other side. We are particularly focussed on identifying a set of guiding principles and actions that will help to ensure the University does not lose the recent gains made in employment of women and other underrepresented groups under the umbrella of our [Diversity and Inclusion Framework](#), [Workplace Gender Equity Strategy](#), and the [Athena SWAN Action Plan](#).

The position paper was developed by members of the [Athena SWAN Committee](#), a diverse group of individuals representing all levels of the academic community, ranging from early career researchers to a Dean as well as representatives from Human Resources. Despite the Committee's focus on advancing gender equity in Science, Technology, Engineering, Mathematics and Medicine (STEMM) fields, most opportunities and risks outlined in this paper are applicable across all disciplines.

Importantly, progress against the recommendations will be overseen and reported on by the Monash Athena SWAN Committee. We anticipate that this paper will provide a framework to help STEMM faculties to deliver on their ambitions to minimise any adverse impact of COVID-19 on women and underrepresented groups.

2. Equity principles for the COVID-19 pandemic

The Athena SWAN Committee provides the following equity principles for STEMM faculties to ensure we maintain progress towards gender equity outcomes during the COVID-19 pandemic.

- We commit to advancing gender equality during and post the COVID-19 crisis
- We commit to communicating all relevant information relating to factors affecting the retention, support and promotion of our staff
- We commit to identifying and addressing existing, new and emerging unconscious and conscious biases that are likely to arise during and after the pandemic
- We commit to addressing unequal gender representation across academic disciplines during the COVID-19 pandemic. In this, we recognise discipline-differences including:
 - The particularly high loss rate of women in science, technology, engineering, mathematics and medicine (STEMM) under business-as-usual scenarios.
 - The need to actively monitor changes and ensure a disproportionate number of women aren't lost from STEMM disciplines as a result of pandemic circumstances.

- We commit to identifying, acknowledging and removing where possible, any additional obstacles generated by additional caring and parenting responsibilities, in particular when assessing productivity for the purposes of career progression.

Acknowledging these broad principles provides a framework for addressing the impact of COVID-19 on (1) Employment security, (2) Flexible working and career breaks and, (3) Career development, progression and promotion. This paper includes specific recommendations for each of these topics in the following section.

3. Emerging COVID-19 Equity Impacts, Risks and Recommendations

3.1 COVID-19 and Employment Security

Magnified inequalities in the labour market

The COVID-19 pandemic has begun to magnify inequalities in the labour market. Between March and April 2020, national data from the Australia Bureau of Statistics showed that job losses impacted women at a greater rate than men (8.1% loss of employment for women; 6.2% for men). National unemployment data released in May 2020 describe a disproportionately greater impact on women whose working hours decreased by 11.5 percent compared to 7.5 percent for men (4). This is particularly pertinent for our casual and sessional staff, 56% of whom are women. These data confirm that in the HE sector COVID-19 is impacting the job security of women to a greater extent than men.

Unconscious bias in decision-making

Unconscious bias is recognised as a major factor impacting employment related decision making. During times of crisis where time constraints and other pressures come into play, the risk is that unintended implicit biases go unchecked and contribute to inequitable decision making. This will have negative impacts on employment security and conditions of underrepresented groups, including women. Steps to reduce unconscious bias in decision making during the COVID-19 pandemic are necessary to ensure equity.

Risk of further widening the gender gap in STEMM disciplines

Emerging research warns that women in STEMM may be further disadvantaged during and post-pandemic if the gender lens is not actively applied across all cost-saving decisions and if equity matters are demoted (5).

With an already substantial underrepresentation of women in STEMM (23% of Professors in STEMM are women), as well as the fact that women in STEMM represent 76% of part-time and 56% of casual and sessional staff, there is a need to focus attention on minimising the impact of COVID-19 on the job security of women. Failure to mitigate this risk has the potential to reverse recent gains in improving gender parity in the STEMM workforce.

Ongoing monitoring is required to identify any changes in the number of women relative to men, and to actively support retention and future recruitment programs to help maintain and continue to improve the gender ratio in the STEMM workforce.

Recommendations:

3.1.1 Mitigate detrimental impact of unconscious bias on employment security of equity groups

- Commit to understanding and reducing the impact of unconscious bias in career-impacting decisions on academic staff.
- Seek a balanced representation of genders on decision-making bodies relating to the impact of the pandemic, including a minimum 40% of either gender.
- Additionally, we recommend that members of all decision making bodies have undergone unconscious bias training ('Inclusive Leadership' training) – a practice of promotions committees.

3.1.2 Equity, Diversity and Inclusion in consideration of contract renewals

- Managers to incorporate Equity, Diversity and Inclusion considerations into the case for renewal, in recognition that staff diversity is not only a key driver for innovation but also role modelling for students from diverse backgrounds.

3.1.3 Track and monitor COVID-19 impacts through data collection and analysis

- Athena SWAN Committee commits to monitoring the gendered impact on STEMM staff. This includes ongoing data collection, analysis and benchmarking in order to identify and understand the uneven impact of the pandemic against appropriate Equity, Diversity and Inclusion indicators on:
 - a. Promotion and probation applications
 - b. Duration and type of leave utilised
 - c. Flexible working adjustments (incl fraction reductions)
 - d. Engagement of casual/sessional staff
 - e. Grant and fellowship applications
 - f. First author/lead papers
 - g. Contract non-renewals
 - h. Attrition rates and voluntary/involuntary reasons

3.1.4 Seek understanding of COVID-19 impacts and experiences on STEMM staff

- The Athena SWAN Committee will continue its oversight of measuring progress against gender equity in STEMM with the newly added focus on understanding the gendered impact of COVID-19 pandemic on STEMM staff.
- To obtain deeper insights into short-term and long-term COVID-19 impacts on our STEMM workforce, the Committee has developed a pulse survey with the view to administer it to Monash staff ~5 times for the next two years. Support from faculties in disseminating and promoting this longitudinal survey is critical. Survey results will be shared with faculties that achieve a 30% response rate.

3.1.5 Support equity policies and programs

- Wherever possible, commit to policies and programs designed to support the retention of women, Indigenous staff and other at-risk groups during and post-pandemic.
- Wherever possible, continue operating existing gender equity programs to maintain momentum gained across diversity and inclusion initiatives. We recognise that budgetary constraints may limit some gender equity programs and initiatives and there may be a need to adapt and modify existing programs to replace as best as possible any programs lost due to budgetary constraint (e.g. develop in-house mentoring/shadowing).

3.2 COVID-19 and Flexible working

Increased caring responsibilities for parents and carers

The closure of schools and outside school hours programs has impacted working parents and carers with an unprecedented intensity. The conflict between competing demands of paid work and home-schooling expectations has received much media attention worldwide (6).

According to the 2019 Staff Equity and Diversity Survey, 37% of Monash staff have a caregiving responsibility for children under the age of 18 (45% of women; 28% of men). Emerging research also suggests that women in heterosexual coupled households are doing disproportionately more children supervision and home schooling during the pandemic than men, which is impacting their ability to work at their pre-pandemic capacity (7).

Long lasting impacts of flexible work practices

Monash's extended provision of flexibility in work practices enabled many of our staff with caregiving responsibilities to *technically* carry on the dual role at times of crisis. However, due to a range of individual circumstances, many will have found combining work, schooling and home life particularly challenging. The impact on mental health, social isolation, exposure to violence, have all been well documented. The University has communicated widely around all these issues and provided resources for staff to help manage the situation, including relevant leave options. Nevertheless, women are likely to be preferentially impacted by these circumstances and the impacts may be long lasting.

A compounding factor in the work from home arrangements and caregiving responsibilities, is the additional workload involved in moving teaching online and in the provision of support to students, particularly those in 1st year, who require more support when commencing their University study and learning remotely. While these issues impact all staff involved in education, women make up the majority of our education-focussed staff and are more likely to be responsible for student pastoral care.

One benefit that may arise from the pandemic is a normalisation of working from home, thereby providing greater flexibility for people with caring responsibilities. Post-pandemic restrictions, any benefits and positives that have emerged should be considered and taken forward into policy and practice.

Recommendations:

3.2.1 Monitor impacts of Working from Home arrangements on staff

- Seek to further understand the extent of impacts of work practices on health and wellbeing of staff and commit to reporting findings with a focus on gender and other equity groups.

3.2.2 Workload adjustments and continuing flexibility

- Commit to recognising appropriate workload allocation and flexibility for all staff during and post-pandemic to account for individual circumstances and unevenly experienced caring and parental responsibilities.
- As we reactivate the campus in line with government policy and advice, support workplace flexibility to ensure staff are first able to restore previously critical support mechanisms before they are required to transition back to campus. This will be also vital for staff who may be in need of additional mental health or wellbeing support.

3.2.3 Inclusive approach to meeting times

- Continue practising inclusive approach to scheduling core faculty/departmental meetings during family-friendly hours. This will help mitigate challenges faced by parents and caregivers, related to altered and uneven access to previously established before school care and after school care options, and subsequently also promote inclusive workplace culture.

3.3 Career development, progression and promotion

In response to the COVID-19 pandemic, many staff have needed to make significant adjustments to their work, while facing ongoing disruptions, dealing with changing priorities and navigating the financial and operational challenges. The pandemic will generate both short-term and long-term impacts on career development and success.

Reduced and uneven participation in career building opportunities

Reduced mobility and travel restrictions due to the pandemic have resulted in reduced participation in important career building opportunities such as academic conferences, cross-institutional collaborations as well as ability to participate in leadership development programs, mentoring and networking opportunities.

While many of these will be experienced by all staff, the unique challenges, disruptions and personal circumstances created by the pandemic are likely to result in uneven impacts for women, carers and other equity groups. Underrepresentation of women and other groups in applications for research grants, first/senior authored papers or promotion opportunities, will provide evidence of a disproportionate impact of COVID-19-related on career development and progression.

Increased caring responsibilities impacting on career advancement

The increased caring and parenting responsibilities for women and primary caregivers overall during this time may disadvantage career opportunities and advancement unless we commit to policies to mitigate these uneven impacts. Many academic staff have already experienced an increase in their teaching loads and work associated with moving course material online, which

was only possible by putting their own research on hold. Early data from research journals confirm that the submission rate of women sole-authors has fallen during the pandemic (8,9,10).

Tailored and targeted career development, progression and promotion guidance and support, accompanied by relevant updates to the *Achievement Relative to Opportunity* guidelines, will work to address the equity impacts of the pandemic on staff.

Impact on student evaluations and SETU scores.

Given the rapid transition to online modes of teaching, combined with student frustrations, challenges and mental health impacts associated with the COVID-19 pandemic, there is a risk that student evaluations of teaching performance and unit delivery could be negatively impacted. Lower than normal SETU scores would have a disproportionate impact on those who are new to teaching, particularly sessional staff, early career researchers or teaching-focused academics, who rely on these scores for future contracts and promotion opportunities. This may be compounded by gender and cultural biases that lead women and non-anglo teaching staff in STEMM disciplines to be ranked lower in teaching evaluations compared to their male colleagues (11, 12).

Recommendations:

3.3.1 Update the University's policy on assessing Achievement Relative to Opportunity¹

- Include a statement that highlights for managers/supervisors who are evaluating Achievement Relative to Opportunity, that the impact of COVID-19 (and other major events) may disproportionately impact women and underrepresented groups.
- Include examples of COVID-19 related impacts and circumstances in the Achievement Relative to Opportunity (ARtO) guidelines for decision-makers and applicants.

3.3.2 Training and knowledge transfer on Achievement Relative to Opportunity

- Host another round of Achievement Relative to Opportunity sessions for staff where COVID-19 related circumstances are discussed, and examples shared on how to approach describing relevant personal and professional circumstances in promotion applications.

3.3.3 Training for decision-makers on Achievement Relative to Opportunity (ARtO)

- Support the development of staff training on the implementation of Achievement Relative to Opportunity, including specific information pertaining to known implicit biases and career disadvantages faced by women and other underrepresented groups (e.g. prevalence of gender and cultural bias in student evaluations (SETU scores) (11, 12), funding outcomes (13), authorship selection (14), and (in some disciplines) citation counts (15). These existing biases can compound with the additional burdens placed on female academics during the COVID-19 pandemic.

3.3.4 Equal access to career-building opportunities post-pandemic

- Continue providing equal opportunity for all eligible staff to access funding to participate in development programs, research related travel, mentoring and networking opportunities.

¹ Updates have been carried out by Monash HR in June to incorporate COVID-19 related impacts in the Guidelines for Assessing Achievement Relative to Opportunity have been updated in June 2020

- Recognise that while the pandemic may have inadvertently accelerated research for some, others suffered losses or diminished their research productivity due to various professional or personal circumstances.

4. Summary of recommendations and responsibilities

RECOMMENDATIONS
3.1 COVID-19 and Employment Security
3.1.1 Mitigate detrimental impact of unconscious bias on employment security of equity groups
3.1.2 Equity, Diversity and Inclusion in consideration of contract renewals
3.1.3 Track and monitor COVID-19 impacts through data collection and analysis
3.1.4 Seek understanding of COVID-19 impacts and experiences on STEMM staff
3.1.5 Support equity policies and programs
3.2 COVID-19 and Flexible working
3.2.1 Monitor impacts of Working from Home arrangements on staff
3.2.2 Workload adjustments and continuing flexibility
3.2.3 Inclusive approach to meeting times
3.3 Career development, progression and promotion
3.3.1 Update the University's policy on assessing Achievement Relative to Opportunity
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5. Conclusion

The impact of COVID-19 on employment security, flexible working and career development, progression and promotion, are acutely felt by all. However, it is well recognised that the careers of women are being impacted disproportionately, and when compounded by their underrepresentation in STEMM, and the structural biases inherent in the system, there is a very real risk that recent sector-wide gains in gender equity will be lost.

It is imperative that STEMM faculties recognise this threat and commit to adopting the proposed set of guiding principles as well as implementing tangible actions where the careers of women and other underrepresented or adversely impacted groups may be influenced.

The Athena SWAN Committee proposes that recommendations made in this paper are adopted by STEMM faculties and that actions and impact are closely monitored for the next two years (July 2020-2022) through the set of defined metrics as well as results of COVID-19 pulse survey.

6. References

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